

Interface Technology · Microcompact temperature/analogue converter

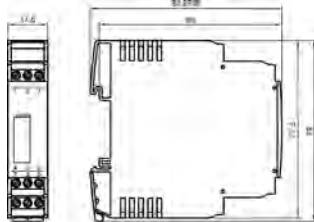
Input: PT100, 3-conductor – with adjustable temperature range from - 50 °C to + 400 °C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

Insulation: 4 kV, 3-way isolation

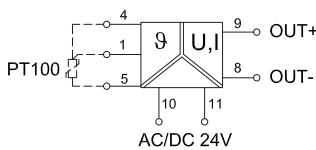


Dimensions

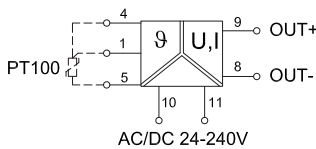


PIN assignment

750816



750817



Range adjustment

S1	
Range	Pos.
-50 – 50°C	0
-50 – 100°C	1
-50 – 150°C	2
0 – 100°C	3
0 – 150°C	4
0 – 200°C	5
0 – 300°C	6
0 – 400°C	7

● → Switch On		S2			
Output		1	2	3	4
0-10V	●				
0-20mA		●			
4-20mA			●		

Description	Part-No.	Type	PU	
Screw terminal				
Nominal voltage	AC/DC 24 V	750816	WPT 6-0816	1
	AC/DC 24–240 V	750817	WPT 6-0817	1
Spring terminal				
Nominal voltage	AC/DC 24 V	751816	WPT 6-1816	1
	AC/DC 24–240 V	751817	WPT 6-1817	1
Input				
PT 100				
Measurement input	PT100, 3-wire			
Galvanic isolation I/O	3-way isolation			
Temperature range	-50–50 °C / -50–100 °C / -50–150 °C / 0–100 °C / 0–150 °C / 0–200 °C / 0–300 °C / 0–400 °C – adjustable via switch			
Transmission frequency	10 Hz			
Input resistance	240 kΩ			
Sensor current	0.5 mA			
Zero /Span	Production comparison			
Output				
	0/10 V	0–20 mA	4–20 mA	
Max. load impedance at I-output	–	400 Ω	–	
Max. load impedance at U-output	>1 kΩ	–	–	
Load impedance	55 Ω	–	–	
Output current	max. 21 mA	–	–	
Output signal	Adjustable via switch			
Ripple	<5 mV _{eff}			
General				
	750816/751816		750817/751817	
Nominal voltage	AC/DC 24 V		AC/DC 24–240 V	
Operation voltage range	DC: 16,8–30 V, AC: 19,2–28,8 V		DC: 16,8–264 V, AC: 19,2–264 V	
Termination	Screw-/spring terminal 0.14–2.5 mm ²			
Rated current	10.0 mA			
Status Indication	LED yellow, blinks for wire break and output goes to a saturated state			
Input/output protection	Overvoltage AC/DC 30 V, Output short circuit-proof			
Accuracy	0.3 % FSR			
Linearity error	0.1 % FSR			
Rise time (10 - 90%)	30 ms			
Build-up time (Accuracy 1%)	60 ms			
Error coefficient of measuring line	0.1 K + 0.1 %/Ω			
Temperature coefficient	150 ppm / K FSR			
Insulation voltage input/output	4.0 kV _{eff}			
Housing material	PPE			
Field installation	rail TS 35 (EN 50022)			
Protection class	IP 20			
Installation position	Optional			
Operation temperature range	-25 °C – 60 °C			
Storage temperature range	-40 °C – 85 °C			
Dimensions (w × h × d)	17.5 × 79.0 × 84.0 mm			
Weight (kg/piece)	0.070			
Approvals	cULus, Class I, Div. 2, Groups A, B, C, D T4A			
Standards	EN 60721-3-3, EN 55011, EN 61000-4-2/6, EN 50178, contamination level 2, Over voltage category III			
Accessories				
	Colour	Article number	Type	PU
Tag holder 7×20 mm	white	760968	BZT-0720	100
Laser printer label 6.35×15.24 mm (sheet with 528 labels)		681033	LEB-0615	1

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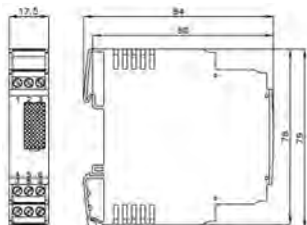
Input: thermocouples Type J, K – with adjustable temp. range from -50 °C to +1200 °C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

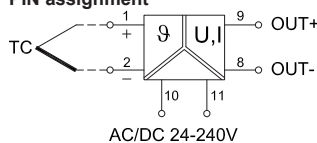
Insulation: 4 kV, 3-way isolation



Dimensions



PIN assignment



Range adjustment

S1			
Range (J)	Pos.	Range (K)	Pos.
-50 – 200°C	0	-50 – 200°C	8
-50 – 350°C	1	-50 – 350°C	9
0 – 200°C	2	0 – 200°C	A
0 – 400°C	3	0 – 400°C	B
0 – 600°C	4	0 – 600°C	C
0 – 800°C	5	0 – 800°C	D
0 – 1000°C	6	0 – 1000°C	E
0 – 1200°C	7	0 – 1200°C	F

● → Switch On		S2		
Output	1	2	3	4
0-10V	●			
0-20mA		●		
4-20mA			●	

Description	Part-No.	Type	PU	
Screw terminal				
Nominal voltage	AC/DC 24–240 V	750847	WTH 6-0847	1
Spring terminal				
Nominal voltage	AC/DC 24–240 V	751847	WTH 7-1847	1
Input				
J (FeCuNi), K (NiCrNi)				
Measurement input	J (FeCuNi), K (NiCrNi) according to DIN / IEC 584-1			
Galvanic isolation I/O	3-way isolation			
Temperature range	-50–200 °C / -50–350 °C / 0–200 °C / 0–400 °C / 0–600 °C / 0–800 °C / 0–1000 °C / 0–1200 °C – adjustable via switch			
Transmission frequency	10 Hz			
Input resistance	330 kΩ			
Sensor current	–			
Zero /Span	Production comparison			
Output	0/10 V	0–20 mA	4–20 mA	
Max. load impedance at I-output	–	–	400 Ω	
Max. load impedance at U-output	>1 kΩ	–	–	
Load impedance	55 Ω	–	–	
Output current	max. 21 mA	–	–	
Output signal	Adjustable via switch			
Ripple	<5 mV _{eff}			
General				
Nominal voltage	AC/DC 24–240 V			
Operation voltage range	DC: 16,8 – 264 V, AC: 19,2 – 264 V			
Rated current	10.0 mA			
Status Indication	LED yellow, flashes in the event of wire breakage and output will saturate			
Input/output protection	Overvoltage AC/DC 30 V, Output short circuit-proof			
Accuracy	0.5 % + 2 K FSR			
Linearity error	0.1 % FSR, thermoelectrical potential linear			
Rise time (10 - 90%)	30 ms			
Build-up time (Accuracy 1%)	60 ms			
Error coefficient of measuring line	–			
Temperature coefficient	150 ppm / K FSR			
Insulation voltage input/output	4.0 kV _{eff}			
Housing material	PPE			
Field installation	rail TS 35 (EN 50022)			
Protection class	IP 20			
Installation position	Optional			
Termination	Screw-/spring terminal 0.14–2.5 mm ²			
Operation temperature range	-25 °C – 60 °C			
Storage temperature range	-40 °C – 85 °C			
Dimensions (w × h × d)	17.5 × 79.0 × 84.0 mm			
Weight (kg/piece)	0.070			
Approvals	cULus, Class I, Div. 2, Groups A, B, C, D T4A			
Standards	EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178, contamination level 2, Over voltage category III			
Accessories				
	Colour	Article number	Type	PU
Jumper comb 24-pin, 26 A	blue	760801	BK 6-0801	5
Tag holder 7×20 mm	white	760968	BZT-0720	100
Laser printer label 6.35×15.24 mm (sheet with 528 labels)		681033	LEB-0615	1

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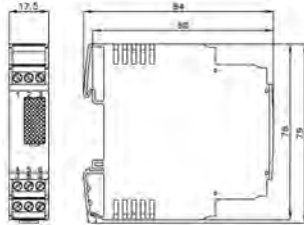
Input: Thermocouples Type J, K – temperature range -50 °C...+1200 °C/-210 °C...+1200 °C

Output: 0–10 V / 0–20 mA / 4–20 mA, adjustable

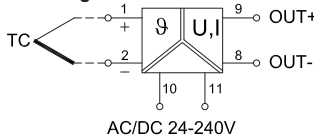
Insulation: 4 kV, 3-way isolation



Dimensions



PIN assignment



Range adjustment

S1			
Range (J)	Pos.	Range (K)	Pos.
-50–150°C	0	-210–105°C	8
-50–250°C	1	-50–250°C	9
-50–350°C	2	-50–350°C	A
0–400°C	3	0–400°C	B
0–600°C	4	0–600°C	C
0–800°C	5	0–800°C	D
0–1000°C	6	0–1000°C	E
0–1200°C	7	0–1200°C	F

● → Switch On		S2			
Output		1	2	3	4
0-10V	●				
0-20mA		●			
4-20mA			●		

Description	Part-No.	Type	PU	
Screw terminal				
Nominal voltage	AC/DC 24–240 V	750848	WTH 6-0848	1
Spring terminal				
Nominal voltage	AC/DC 24–240 V	751848	WTH 6-1848	1
Input				
		J (FeCuNi), K (NiCrNi)		
Measurement input	J (FeCuNi), K (NiCrNi) according to DIN / IEC 584-1			
Galvanic isolation I/O	3-way isolation			
Temperature range	J: -50–150 °C / -50–250 °C / -50–350 °C / 0–400 °C / 0–600 °C / 0–800 °C / 0–1000 °C / 0–1200 °C K: -210–105 °C / -50–250 °C / -50–350 °C / 0–400 °C / 0–600 °C / 0–800 °C / 0–1000 °C / 0–1200 °C			
Transmission frequency	10 Hz			
Input resistance	330 kΩ			
Sensor current	–			
Zero /Span	Production comparison			
Output	0/10 V	0–20 mA	4–20 mA	
Max. load impedance at I-output	–	400 Ω	–	
Max. load impedance at U-output	>1 kΩ	–	–	
Load impedance	55 Ω	–	–	
Output current	max. 21 mA	–	–	
Output signal	Adjustable via switch			
Ripple	<5 mV _{eff}			
General				
Nominal voltage	AC/DC 24–240 V			
Operation voltage range	DC: 16.8 – 264 V, AC: 19.2 – 264 V			
Rated current	10.0 mA			
Status Indication	LED yellow, flashes in the event of wire breakage and output will saturate			
Input/output protection	Overvoltage AC/DC 30 V, Output short circuit-proof			
Accuracy	0.5 % + 2 K FSR			
Linearity error	0.1 % FSR, thermoelectrical potential linear			
Rise time (10 - 90%)	30 ms			
Build-up time (Accuracy 1%)	60 ms			
Error coefficient of measuring line	–			
Temperature coefficient	< 150 ppm / K FSR			
Insulation voltage input/output	4.0 kV _{eff}			
Housing material	PPE			
Field installation	rail TS 35 (EN 50022)			
Protection class	IP 20			
Installation position	Optional			
Termination	Screw-/spring terminal 0.14–2.5 mm ²			
Operation temperature range	-25 °C – 60 °C			
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Dimensions (w × h × d)	17.5 × 79.0 × 84.0 mm			
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Approvals	–			
Standards	EN 60721-3-3; EN 55011; EN 61000-4-2/6; EN 50178			
Accessories				
Tag holder 7×20 mm	white	760968	BZT-0720	100
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